

ABSTRACT

The invention provides polypeptides and nucleic acids which identify and encode LaeA, a regulator of fungal secondary metabolite production which exhibits global
5 control over secondary metabolite biosynthetic gene clusters. The invention further provides expression vectors, host cells, methods of increasing the production of secondary metabolites in an organism naturally producing a secondary metabolite or engineered to produce a secondary metabolite, and methods of identifying novel secondary metabolite biosynthesis gene clusters.